

What is claimed is:

1 SUB A7 1. A database system comprising:  
2 a persistent data storage device storing a first file management context and  
3 having a pool of storage elements; and  
4 a non-persistent memory storing a second file management context,  
5 the first file management context to indicate allocated permanent files in  
6 the pool of storage elements, and col 1-3  
7 the second file management context to indicate allocated temporary files  
8 and permanent files in the pool of storage elements. col 1-5

1 2. The database system of claim 1, wherein the first file management context  
2 is a subset of the second file management context.

1 3. The database system of claim 1, further comprising a control module  
2 adapted to update an entry in the second file management context without updating an  
3 entry in the first file management context to allocate a temporary file.

1 4. The database system of claim 3, wherein the control module is adapted to  
2 update an entry in both the first and second file management contexts to allocate a  
3 permanent file.

1 5. The database system of claim 1, wherein the pool of storage elements  
2 comprises a pool of storage blocks.

1 6. The database system of claim 5, further comprising a control module  
2 adapted to allocate one or more of the storage blocks to a temporary file or a permanent  
3 file.





to allocate blocks in the persistent storage device, and wherein updating the first file management context comprises updating the storage identifier map and the allocation unit map.

19. The method of claim 18, wherein the second file management context contains a storage identifier map to allocate storage identifiers and an allocation unit map to allocate blocks in the persistent storage device, and wherein updating the second file management context comprises updating the storage identifier map and the allocation unit map.

20. The method of claim 16, further comprising receiving a request, the request containing a flag to indicate allocation of a temporary file or a permanent file, wherein updating one or both of the first and second file management contexts is based on the flag.

21. The method of claim 16, further comprising copying the first file management context to the non-persistent memory upon system startup.

22. The method of claim 16, further comprising performing at least one of a transaction locking and database logging operation when updating the first file management context and not performing the transaction locking or database logging operation when updating the second file management context without updating the first file management context.

23. An article comprising at least one storage medium containing instructions that when executed cause a system to:

- store a first file management context to indicate allocation of temporary and permanent files; and
- store a second file management context to indicate allocation of permanent files.

